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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,273	12/14/2001	Lirio Quintero	154-26969-US	3997

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EXAMINER

TUCKER, PHILIP C

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/023,273

Applicant(s)

QUINTERO, LIRIO

Examiner

Philip C. Tucker

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 376-391 and 603-619 is/are allowed.
- 6) ☒ Claim(s) See Continuation Sheet is/are rejected.
- 7) ☒ Claim(s) 360,365-369,374,375,434,435,453-455,471,500,501,506,507,621 and 629 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Continuation of Disposition of Claims: Claims pending in the application are 329-370,372,374-391,413,415,417,418,420-435,437-441,443-462,465-471,473-476,478-488,492-501,503-507,523,524,526-549,576,577,579-582,584-595 and 597-671.

Continuation of Disposition of Claims: Claims rejected are 329-359,361-364,370,372,413,415,417,418,420-433,437-441,443-452,456-462,465-470,473-476,478-488,492-499,503-505,523,524,526-549,576,577,579-582,584-595,597-602,620,622-628 and 630-671.

DETAILED ACTION

Claim Objections

1. Claims 528 and 584 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 528 fails to further limit claim 523. Claim 584 fails to further limit claim 576.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 496, 532, 535 and 589 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

These claims are all dependent upon cancelled claims. The scope of the claims are thus not clear.

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 329-358 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter

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which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 329 – 358 add the limitation that the fluid is non-aerated. This is a negative limitation which does not find support in the specification, and thus adds new matter (Ex parte Grasselli 231 USPQ 393).

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 329, 334, 335, 339-341, 343, 346, 347, 349, 350, 352-357 are rejected under 35 U.S.C. 102(b) as being anticipated by House (5977030).

House teaches a water in oil fluid which is used as a drilling fluid which comprises an oligosaccharide surfactant and a xanthan polymer (see the examples). The surfactant is specified at a level of 2 lb/bbl (column 3, lines 55-56). The xanthan used would have molecular weights within the scope of the present invention (see column 4, lines 24-34). Other polymers, such as starch derivatives may be used in the drilling fluid (see column 4, lines 56-65). The amount of water soluble polysaccharide is

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specified at a level of "about 6 ppb" which anticipates the "about 7.5 ppb" of the present invention (see *In re Ayers* 69 USPQ 109, *In re DeVaney* 88 USPQ 97). Fluids such as olefins and polyalphaolefins may be used as the internal phase, up to a level of about 30% (see column 3, lines 20-26 and example 1). Such would inherently possess fluid loss, rheology and surface tension properties within the scope of the present invention.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 440, 620, 622-628, 630-634, 641-642, 645-657, 661-671 are rejected under 35 U.S.C. 103(a) as being unpatentable over House (5977030).

House teaches an oil in water fluid which is used as a drilling fluid which comprises an oligosaccharide surfactant and a xanthan polymer (see the examples). The surfactant is specified at a level of 2 lb/bbl (column 3, lines 55-56). The xanthan used would have molecular weights within the scope of the present invention (see column 4, lines 24-34). Other polymers, such as starch derivatives of the present invention may be used in the drilling fluid (see column 4, lines 56-65). Fluids such as olefins and polyalphaolefins may be used as the internal phase, up to a level of about 30% (see column 3, lines 20-26 and example 1). House differs from the present invention in that molecular weight of the starch is not disclosed, and the range of

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concentrations of claim is not disclosed. The range of molecular weights claimed from 200,000 to 2,500,000 is within the typical molecular weights of starches used in drilling fluids, and their use would be obvious to one of ordinary skill in the art. It would be one of ordinary skill in the art to vary the amounts of starch and xanthan in order to obtain optimum performance of the drilling fluid.

5. Claims 329-359, 361-364, 370, 372, 413, 415, 417, 418, 420-433, 437-441, 443-452, 456-462, 465-470, 473-476, 478-488, 492-499, 503-505, 523, 524, 526-542, 546-549, 576, 577, 579-582, 584-595, 597-602, 635, 636-650, 652-667, 669-671 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell (6020407) optionally in view of House (5977030).

Campbell teaches a thickening composition which comprises a polymer and a surfactant associated therewith (see column 6, lines 38-44). The composition may be used to thicken drilling fluids (see column 1, lines 36-62). The polymer may be a starch (see column 3, lines 48-49), or other polymers useful in drilling fluids (column 3, lines 23-30). The surfactants are within the scope of the present invention (see column 7, lines 38-48). The use of sodium alkyl ether sulfates, such as sodium tridecyl ether sulfate, would be obvious to one of ordinary skill in the art over the teaching of the use of sodium salts of alkyl ether sulfates by Campbell. The composition is added to aqueous fluids within the concentration scope of the present invention (column 8, lines 44-58). The composition may be added to a latex and may comprise clays, which would be emulsified in the aqueous composition formed. The levels of latex polymer

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emulsified would be within the scope of up to 20% of the present invention.

Furthermore, the addition of clays at such levels is well known in the art of drilling fluids, and would be obvious to one of ordinary skill in the art. Although a specific example of a composition comprising the polymer and surfactant at the specified concentration of claim 329 is not disclosed, it would have been obvious to one of ordinary skill in the art to vary the concentration within the scope of the teachings of column 8, lines 44-51, and ratios of column 6, lines 38-44 of Campbell, given the teaching of Campbell that polymer thickened fluid will form within such ranges. Campbell further differs in that the specified molecular weights and types of starch are not specifically disclosed. The range of molecular weights claimed from 200,000 to 2,500,000 is within the typical molecular weights of starches used in drilling fluids, and their use would be obvious to one of ordinary skill in the art. The types of starch substituents of the present claims, are notoriously known in the art of drilling fluids, and would be obvious to one of ordinary skill in the art over the teachings of drilling fluids by Campbell. Optionally, House teaches that such types of starch are known in the art of drilling fluids, and would be obvious to one of ordinary skill in view of the teaching of drilling fluids by Campbell.

6. Claims 523, 524, 526-539, 541-544, 546-549 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brookey (2001/0027880).

Brookey teaches a well drilling fluid which comprises a xanthan, and may further comprise a starch (see paragraphs 0019 and 0022). Surfactants within the scope of the present invention may be used therein (see example 5). The surfactant may be in the

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concentration range of the present invention (see paragraphs 0025 and 0034). Brookey differs in that the specified molecular weights and types of starch are not specifically disclosed. The range of molecular weights claimed from 200,000 to 2,500,000 is within the typical molecular weights of starches used in drilling fluids, and their use would be obvious to one of ordinary skill in the art. It is noted in claim 523, there is not a specific statement that the emulsifiable material is present, thus such may be zero.

7. Please see PTOL-37 form for objected and allowable claims.

8. Applicants arguments and amendment have been considered but are deemed only partially persuasive. Applicant distinguished over Sydansk, but added new matter in making the negative limitation. With respect to House, the case law In re Ayers, shows that “about 10%” was anticipated by “about 8%”. The overlapping of scope of the claimed amount and that taught by House similarly renders the claims anticipated, and necessarily obvious. New rejections are also presented in this office action.

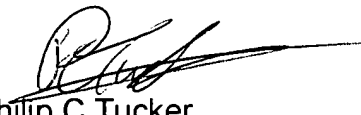
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip C. Tucker whose telephone number is 571-272-1095. The examiner can normally be reached on Monday - Friday, Flexible schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Philip C Tucker
Primary Examiner
Art Unit 1712

PCT-3297